BRUHAT BANAGLORE MAHANAGARA PALIKE

Executive Engineer -yelahanka Division

Detailed Estimate

Name of the Work Asphalting and improvements to roads at Sapthagiri layout 1st main road in ward No-01 of yelahanka sub division.

Estimate Amount : 4000000.00

Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
	ROAD WORKS								
1	KSRRB M300-14. Excavation for roadwork in all type of soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location to a lead of 1.00 km and complete as per specifications. MORTH Specification No.301 **(Page No 143., I.No.19.14 of KPWD S.R 2016-17).**								
	Basic rate	***Cum.***							
	Area Wieght age @ 6%	***46.00***							
	Total Rate in Rs	***2.76***							
	new contruction	***48.76***							
	Sapthagiri main road from Kogilu main road to 5th cross road								
	Ch: (0 - 33)		1	33	8.00	0.400	105.60		
	Ch: (33 - 201)		1	168	7.00	0.400	470.40		
	5th Cross road from Dead end to Dead end								
	Ch: (0 - 45)		1	45	4.50	0.400	81.00		
	4th Cross road from Dead end to Dead end								
	Ch: (0 - 121)		1	121	4.50	0.400	217.80		
	3rd Cross road from Dead end to Dead end								
	Ch: (0 - 121)		1	121	4.50	0.400	217.80		
							1092.60	**48.76**	**53275.18** ✓
2	KSRRB M400-6.1. Construction of granular sub-base by providing close graded material, crushed stone aggregates of granite/trap/basalt material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method.Close graded granular sub-base material as per 400-1 For Grading- II Material **(Page No 155., I.No.20.4.2 of KPWD S.R 2016-17).**								
	Basic rate	***Cum.***							
	Area Wieght age @ 6%	***1571.00***							
	Total Rate in Rs	***94.26***							
	new contruction	***1665.26***							
	Sapthagiri main road from Kogilu main road to 5th cross road								
	Ch: (0 - 33)		1	33	8.00	0.150	39.60		
	Ch: (33 - 201)		1	168	6.90	0.150	173.88		
	5th Cross road from Dead end to Dead end								
	Ch: (0 - 45)		1	45	4.50	0.150	30.38		
	4th Cross road from Dead end to Dead end								
	Ch: (0 - 121)		1	121	4.50	0.150	81.68		
	3rd Cross road from Dead end to Dead end								
	Ch: (0 - 121)		1	121	4.50	0.150	81.68		
							407.21	**1665.26**	**678102.20** ✓
3	KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite/trap/basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406								

Asst. Executive Engineer
Yelahanka Sub. Divison
(BBMP Ynk. Zn)
Yelahanka, Bangalore

Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
	(Page No 158., I.No.20.18 of KPWD S.R 2016-17).								
		Cum.							
	Basic rate	*1668.00*							
	Area Wieght age @ 6%	*100.08*							
	Total Rate in Rs	*1768.08*							
	new contruction								
	Sapthagiri main road from Kogilu main road to 5th cross road								
	Ch: (0 - 33)		1	33	8.00	0.225	59.40		
	Ch: (33 - 201)		1	168	7.00	0.225	264.60		
	5th Cross road from Dead end to Dead end								
	Ch: (0 - 45)		1	45	4.50	0.225	45.56		
	4th Cross road from Dead end to Dead end								
	Ch: (0 - 121)		1	121	4.50	0.225	122.51		
	3rd Cross road from Dead end to Dead end								
	Ch: (0 - 121)		1	121	4.50	0.225	122.51		
							614.59	1768.08	1086639.87 ✓
4	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WBM,WMM ,including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per Specifications. MORTH Specification No. 502								
	(Page No 161., I.No.21.6 of KPWD S.R 2016-17).								
		Sqm							
	Basic rate	*26.00*							
	Area Wieght age @ 6%	*1.56*							
	Total Rate in Rs	*27.56*							
	new contruction								
	Sapthagiri main road from Kogilu main road to 5th cross road								
	Ch: (0 - 33)		1	33	8.00		264.00		
	Ch: (33 - 201)		1	168	7.00		1176.00		
	5th Cross road from Dead end to Dead end								
	Ch: (0 - 45)		1	45	4.50		202.50		
	4th Cross road from Dead end to Dead end								
	Ch: (0 - 121)		1	121	4.50		544.50		
	3rd Cross road from Dead end to Dead end								
	Ch: (0 - 121)		1	121	4.50		544.50		
							2731.50	27.56	75280.14 ✓
5	KSRRB 500-7. Providing and applying tack coat using 80/100 grade Bitumen (VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm , heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5								
	(Page No 161., I.No.21.7 of KPWD S.R 2016-17).								
	Basic rate	*11.00*							
	Area Wieght age @ 6%	*0.66*							
	Total Rate in Rs	*11.66*							
	new contruction								
	Sapthagiri main road from Kogilu main road to 5th cross road								
	Ch: (0 - 33)		2	33	8.00		528.00		
	Ch: (33 - 201)		2	168	7.00		2352.00		
	5th Cross road from Dead end to Dead end								
	Ch: (0 - 45)		2	45	4.50		405.00		
	4th Cross road from Dead end to Dead end								
	Ch: (0 - 121)		2	121	4.50		1089.00		
	3rd Cross road from Dead end to Dead end								
	Ch: (0 - 121)		2	121	4.50		1089.00		

Asst. Executive Engineer
Yelahanka Sub. Division
(BBMP Ynk. Zn)

Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
							5463.00	11.66	63698.58
6	KSRRB M500- 17. Providing, laying dense graded bituminous macadam using 40/60 TPH capacity H.M.P with Mechanical paver Gr-II(50mm to 75mm), crushed aggregates of specified grading premixed with 4.5% VG 30 grade bituminous binder and filler, transporting the hot mix to work site , laying to the required grade,level and alignment, rolling with wheeled , vibratory and tandeem rollers to achieve the desired compaction as per MORTH Table-500-10 including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No.507 **(Page No 163., I.No.21.17.6 of KPWD S.R 2016-17).**								
		Cum.							
	Basic rate	*6071.00*							
	Area Wieght age @ 6%	*364.26*							
	Total Rate in Rs	*6435.26*							
	new contruction								
	Sapthagiri main road from Kogilu main road to 5th cross road								
	Ch: (0 - 33)		1	33	8.00	0.050	13.20		
	Ch: (33 - 201)		1	168	7.00	0.050	58.80		
	5th Cross road from Dead end to Dead end								
	Ch: (0 - 45)		1	45	4.50	0.050	10.13		
	4th Cross road from Dead end to Dead end								
	Ch: (0 - 121)		1	121	4.50	0.050	27.23		
	3rd Cross road from Dead end to Dead end								
	Ch: (0 - 121)		1	121	4.50	0.050	27.23		
							136.58	6435.26	878895.63
7	KSRRB M500- 19. Providing, laying bituminousConcrete using 40/60 TPH capacity H.M.P with Mechanical paver Gr-II(30mm to 45mm), crushed aggregates of specified grading premixed with 5.4% VG 30 grade bituminous binder and filler , transporting the hot mix to work site , laying to the required grade,level and alignment, rolling with wheeled , vibratory and tandeem rollers to achieve the desired compaction as per MORTH Table-500 9 including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No.509 **(Page No 165., I.No.21.22.6 of KPWD S.R 2016-17).**								
		Cum.							
	Basic rate	*6859.00*							
	Area Wieght age @ 6%	*411.54*							
	Total Rate in Rs	*7270.54*							
	new contruction								
	Sapthagiri main road from Kogilu main road to 5th cross road								
	Ch: (0 - 33)		1	33	8.00	0.030	7.92		
	Ch: (33 - 201)		1	168	7.00	0.030	35.28		
	5th Cross road from Dead end to Dead end								
	Ch: (0 - 45)		1	45	4.50	0.030	6.08		
	4th Cross road from Dead end to Dead end								
	Ch: (0 - 121)		1	121	4.50	0.030	16.34		
	3rd Cross road from Dead end to Dead end								
	Ch: (0 - 121)		1	121	4.50	0.030	16.34		
							81.95	7270.54	595784.40
8	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 4kms. **.(Refer Table, Page No.140)**								
		Cum.							
	Basic rate	*80.80*							
	Total Rate in Rs	*80.80*							
					For item no	1	1092.60		
							1092.60	80.80	88282.08

Asst. Executive Engineer
Yelahanka Sub. Divison
(BBMP Ynk. Zn)
Yelahanka, Bangalore

Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
	Sub total-1								3519958.08
	ROAD FURNITURES								
9	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm aren, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803								
	(Page No 185, I No.24 15 of KPWD S R 2016-17)								
		Sqm							
	Basic rate	512.00							
	Area Wieght age @ 6%	30.72							
	Total Rate in Rs	542.72							
	Road Marking								
	new contruction								
	Sapthagiri main road from Kogilu main road to 5th cross road								
	Ch: (0 - 33)		2.5	33	0.10		8.25		
	Ch: (33 - 201)		2.5	168	0.10		42.00		
	5th Cross road from Dead end to Dead end								
	Ch: (0 - 45)		2	45	0.10		9.00		
	4th Cross road from Dead end to Dead end								
	Ch: (0 - 121)		2	121	0.10		24.20		
	3rd Cross road from Dead end to Dead end								
	Ch: (0 - 121)		2	121	0.10		24.20		
							107.65	542.72	
	Sub Total-2								
	Total								
10	Cost towards Preperation of DPR,PMC/QC @ 1%								
11	**Cost towards KIRDL Charges @ 9%**								
12	**Cost of Plastic@ 8% of bitumen qty for BC**	Kg	1	924.34			27.00		
13	Misclleneous and other charges								
	Grand Total								

ADMINISTRATIVELY SANCTIONED FOR Rs 40.00L

Rupees Forty Lakhs - 00/-

Under P-3089 -

Registered as EE ( )

Subject to conditions contained

enclosed memo EE ( ) No.

Dt Estimate A/S and

SC/EE/KPWD/A.38/16-17 dated 18.3.17 Rs 40.00 Lakhs

Commissioner (Addl.) BBMP Bengaluru-92

1567.64

322054.37

24957.17

3038.93

4000000.00

Certificate:-

1. That the workspot has been inspected and provisions made in the estimate are adequate and necessary
2. Work spot comes with in the Bruhat Bangalore Mahanagara Palike Limits.
3. That estimate is based on the PWD SR of 2016-17
4. The work is not split up
5. These works are not taken up in any grants and free from defect liability period
6. Earlier improvements taken up in the proposed roads are recorded in road history

Technical Sanction Accorded for 40.00 lakhs Head of P.3089 CER NO 205 Dt: 24.05.17

Consultants
For M/s Mecades core technologies pvt ltd

Asst. Engineer
Ward No:1
BBMP

AEE
Asst. Executive Engineer
Yelahanka Sub Division
(BBMP Ynk. Zn)
Yelahanka, Bangalore

EE (YNK)

Executive Engineer
yelahanka division
BBMP

CIVIL TECH LABS

5, 1st Cross, Srinivasa Colony, Mission Road, Bangalore - 560027
Ph: 080 - 4114 2867, Email: civiltechlabs@gmail.com

TEST REPORT
GRADATION TEST ON WET MIX MACADAM

Name & Address of the Customer	AEE, Yelahanka Sub Division, BBMP.
Name of Work	Asphalting and Improvements to roads at Sapthagiri layout 1st main road in ward no 01 of Yelahanka Sub Division.
Name of the Agency	M/s. Technical Manager (West), KRIDL
Date of Testing	11/04/2017
Technical Reference	MORTH Table 400-11

	Sample-2		
IS Sieve Designation (mm)	**% By Weight Passing IS Sieve**	**Actual % By Weight Passing IS Sieve**	**Remarks**
53	100	**100**	**Satisfy the Requirements**
45	95-100	**98.4**	
22.4	60-80	**72.4**	
11.2	40-60	**53.6**	
4.75	25-40	**34.8**	
2.36	15-30	**23.5**	
0.6	8-22	**18.4**	
0.075	0-8	**6.8**	

Note:

1.The results relate only to the items tested.

2.Report shall not be reproduced except in full, without the written approval of the lab.

3.Any correction invalidates this report.

4.The results are based on the test conducted on samples supplied by the customer.

Khushboo

(KHUSHBOO L.)
Quality Manager

CIVIL TECH LABS BANGALORE

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TEST REPORT
GRADATION TEST ON WET MIX MACADAM

Name & Address of the Customer	AEE, Yelahanka Sub Division, BBMP.
Name of Work	Asphalting and Improvements to roads at Sapthagiri layout 1st main road in ward no 01 of Yelahanka Sub Division.
Name of the Agency	M/s. Technical Manager (West), KRIDL
Date of Testing	11/04/2017
Technical Reference	MORTH Table 400-11

	Sample-3		
IS Sieve Designation (mm)	**% By Weight Passing IS Sieve**	**Actual % By Weight Passing IS Sieve**	**Remarks**
53	100	**100**	**Satisfy the Requirements**
45	95-100	**97.8**	
22.4	60-80	**73.4**	
11.2	40-60	**52.8**	
4.75	25-40	**35.6**	
2.36	15-30	**21.4**	
0.6	8-22	**17.8**	
0.075	0-8	**7.3**	

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Khushboo

(KHUSHBOO L.)
Quality Manager

CIVIL TECH LABS BANGALORE

CIVIL TECH LABS

Accredited by **NABL** as per ISO/ IEC 17025 : 2005

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Ph: 080 - 4114 2867 / Mob. : 96862 31801, Email: civiltechlabs@gmail.com

T-2654

To,

Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP.

15th April 2017

Dear Sir,

Sub: Testing of Bituminous Macadam.

As requested, tests on physical properties were carried out for the Bituminous Macadam supplied by you, for the work of **'Asphalting and Improvements to roads at Sapthagiri layout 1st main road in ward no 01 of Yelahanka Sub Division.'**

Please find the enclosed Test Reports of the above.

Thanking You,
For Civil Tech Labs

CIVIL TECH LABS BANGALORE

(KHUSHBOO L.)
Quality Manager

AE-1

CIVIL TECH LABS

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Ph: 080 - 4114 2867, Email: civiltechlabs@gmail.com

TEST REPORT

STRIPPING TEST OF ROAD AGGREGATES

Bituminous Macadam (BM)

Name & Address of the Customer	AEE, Yelahanka Sub Division, BBMP.
Name of Work	Asphalting and Improvements to roads at Sapthagiri layout 1st main road in ward no 01 of Yelahanka Sub Division.
Name of Agency	M/s. Technical Manager (West), KRIDL
Date of Testing	15/04/2017

Method of Test	Observation No.	Uncovered Area/Stripping in %	Average Stripping Value in %	As Per Morth Table 500-03	Remarks
IS 6241-1971 (Reaffirmed 2003)	1	4.05	4.03	5 % Maximum	Satisfactory
	2	4.03			
	3	4.02			

Note:

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4. The results are based on the test conducted on samples supplied by the client.

(KHUSHBOO L.)
Quality Manager

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TEST REPORT

WATER ABSORPTION TEST OF ROAD AGGREGATES

Bituminous Macadam (BM)

Name & Address of the Customer	AEE, Yelahanka Sub Division, BBMP.
Name of Work	Asphalting and Improvements to roads at Sapthagiri layout 1st main road in ward no 01 of Yelahanka Sub Division.
Name of Agency	M/s. Technical Manager (West), KRIDL
Date of Testing	15/04/2017

Method of Test	Sample No.	Water Absorption in %	Average Water Absorption in %	As per MORTH Table 500-03.	Remarks
IS 2386 (Part 3)	1	1.02	0.98	2 % Maximum	Satisfactory
	2	0.95			
	3	0.98			

Note:

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Khushboo

(KHUSHBOO L.)
Qulaity Manager

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